Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

STAT

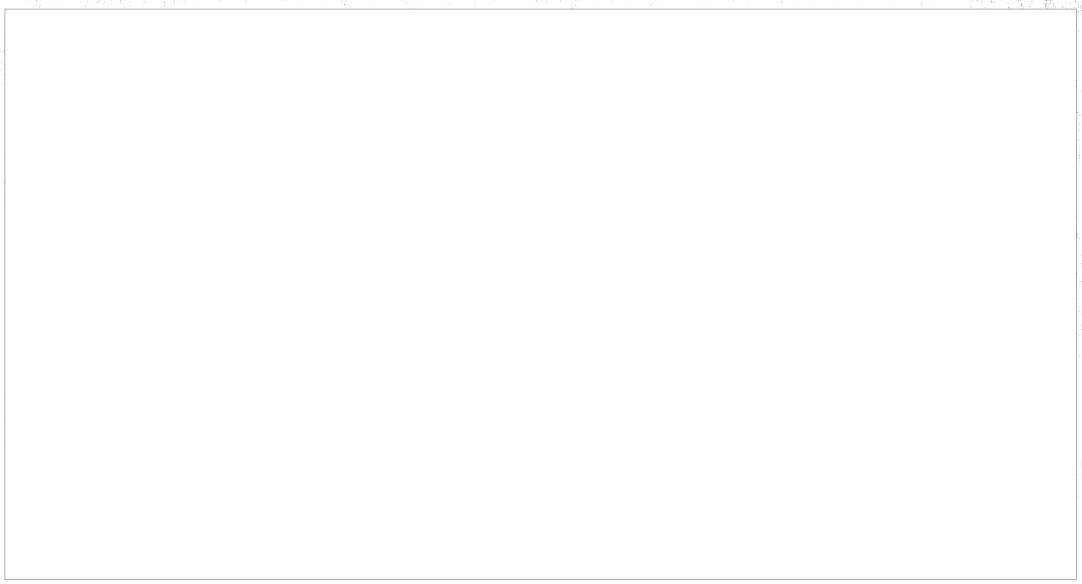


Table of Contents of the Soviet Periodical

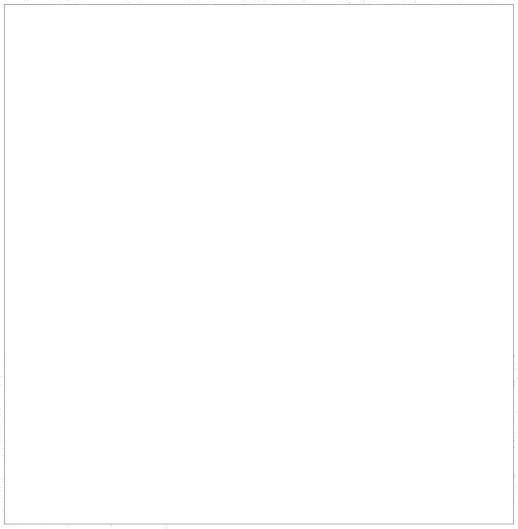
"Izvestiya Akademii Nauk SSSR"

(News of the Academy of Sciences USSR) Dept. of

Technical Sciences

Izvestiya Akademii Nauk SSSR, otdeleniye Tekhnicheskikh Nauk, No 7-8, 1953, Moscow

STAT



Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

[redacted]

TABLE OF CONTENTS OF THE SOVIET PERIODICAL

IZVESTIYA AKADEMII NAUK USSR

(NEWS OF THE ACADEMY OF SCIENCES, USSR)

DEPT.
DIVISION OF TECHNICAL SCIENCES

No. 7-8 - 1945

P. 617-621

Ruvim Grigor'yevich Galankin. (d. 1945)

P. 622-637 - L. M. Sretenskiy, Corresponding Member, Academy of Sciences, USSR.

Circumvention of Flat Contours by a Flow of Gas.

Submitted 9 Apr 1945.

P. 638-647 - M. A. Velikanov, Corresponding Member, Academy of Sciences, USSR.

Movement of Underground Waters in Coarse-Textured Soils.

Submitted 16 Apr 1945.

Institute of Mechanics, Academy of Sciences, USSR.

P. 648-656 - G. A. Firsov.

Concerning the Question of Ship-Stability During a Squall.

Presented 24 Feb 1945 by V. L. Posdyumin, Academician.

P. 657-670 - O. V. Akimov and Ts. L. Mints, Corresponding Members, Academy of Sciences, USSR.

Structure of Austenitic Heat-Resisting Steel of Type 13Kh, 13N1, 2N (EI-69).

Submitted 29 Jan 1945.

Laboratory of Metal Physics, All-Union Institute of Aviation Materials.

P. 671-685 - D. A. Diamidovskiy.

Determining Productivity and Dimensions of Reverberatory Smelting Furnaces.

Presented 19 Mar 1945 by M. A. Pavlov, Academician.

P. 686-695 - V. Ya. Dubovoy.

Flow in Carbon Steels.

Presented 21 Aug 1944 by M. P. Chizhevski, Academician.

P. 696-700 - B. A. Vvedenskiy and V. I. Balashova, Academicians.

Calculation of "Non-Reflecting Coating" in a Wave Guide.

Submitted 4 Jun 1945.

Section on Scientific Treatment of Electrical Communication Problems, Academy of Sciences, USSR.

Solution of Problems in Electric Communications,

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

P. 701-710 - G. A. Nikolayev.

Application of Electric Welding in Various Regions of the National Economy.

Presented 23 Apr 1945 by V. I. Mikitin, Academician.

P. 711-738 - V. K. Popov and S. L. Kabakov.

Operational Analysis of Thermal Relay-Type Sequential Electric Drive with Shunt-Wound Motor Characteristics as Reactive Static Network.

Presented 29 Mar 1945 by V. P. Nikitin, Academician.

P. 739-745 - D. V. Golubev.

Clarification of Electrical Properties of Electric Arc Furnaces Obtained as a Result of Circular Diagrams.

Presented 29 Nov 1944 by V. P. Nikitin, Academician.

P. 746-763 - Z. F. Chukhanov, and A. A. Skopalina, Corresponding Members, Academy of Sciences, USSR.

Question of Low Temperature Carbonization Process of Solid Fuel. Report 1.

Submitted 1[illegible] Power Eng

G. M. Krzhizhanovski Energy Institute, Academy of Sciences, USSR.

P. 764-766 - I. I. Morilov.

One Paradox of Conditions Limiting Flow of Gases

Presented 7 Apr 1945 by M. V. Kirpichev, Academician.

K. Ye. Voroshilov Naval Order of Lenin Academy [illegible]

P. 767-772 - R. L. Pevzner.

Fundamental Conditions for Selecting Refractory Materials for Locomotive Coal-Pulverizing Fire Boxes.

Presented 9 May 1944 by V. N. Obraztsov, Academician.

P. 773-786 - A. A. Agroskin and F. M. Pitin.

Application of a Method of Moistening a Coal Charge with Mineral Additions of Oil--this Method Applicable in the Ural By-Product Coke Mills.

Presented 2 Apr 1945 by N. P. Chizhevski, Academician.

G. M. Krzhizhanovskiy Energy Institute, Academy of Sciences, USSR.

P. 787-790

Chronicle.

P. 791-792

Council on Refractory Material, Institute of Metallurgy, Academy of Sciences, USSR.

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

P. 701-710 - G. A. Nikolayev.

Application of Electric Welding in Various Regions of the National Economy.

Presented 23 Apr 1945 by V. I. Nikitin, Academician.

P. 711-738 - V. K. Popov and S. L. Kabakov.

Computational Analysis of Thermal Relay-Type Sequential Electric Drive with Shunt-Wound Motor Characteristics as Reactive Static Moment.

Presented 29 Mar 1945 by V. P. Nikitin, Academician.

P. 739-745 - D. V. Golubev.

Clarification of Electrical Properties of Electric Arc Furnaces Obtained as a Result of Circular Diagrams.

Presented 29 Nov 1944 by V. P. Nikitin, Academician

P. 746-763 - Z. F. Chukhanov, and A. A. [illegible], Corresponding Members, Academy of Sciences, USSR

Dynamics of Low Temperature Carbonization Process of Solid Fuel. Report 1.

Submitted 12 Dec 1944

G. M. Krzhizhanovskiy Energy Institute, Academy of Sciences, USSR

P. 764-766 - I. I. Novikov

One Paradox of Conditions Limiting Flow of Gases

Presented 7 Apr 1945 by M. V. Kirpichev, Academician.

K. Ye. Voroshilov Naval Order of Lenin Academy [illegible]

P. 767-772 - R. L. Pevzner.

Fundamental Conditions for Selecting Refractory Materials for Locomotive Coal-Pulverizing Fire Boxes.

Presented 9 May 1944 by V. N. Obraztsov, Academician.

P. 773-786 - A. A. Agroskin and F. N. Pitin.

Application of a Method of Moistening a Coal Charge with Minute Additions of Oil--This Method Applicable in the Ural By-Product Coke Mills.

Presented 2 Apr 1945 by N. P. Chizhevskiy, Academician.

G. M. Krzhizhanovskiy Energy Institute, Academy of Sciences, USSR.

P. 787-790

Chronicle.

P. 791-792

Council on Refractory Material, Institute of Metallurgy, Academy of Sciences, USSR.

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

P. 867-874 - P. G. Nevzglyadov.

Concerning Eddies in Liquid-Conveying Circular Pipes.

Presented 19 Apr 1945 by V. I. Smirnov, Academician.

Leningrad State University.

P. 875-886 - D. I. Sherman.

Concerning Certain Problems of the Static Theory of Elasticity for the Half-Space $z \geq 0$ and for Two Interconnected Half-Spaces $z \gtrless 0$ with Different Elastic Properties

Presented 7 Jun 1944 by L. S. Leybenzon, Academician

P. 887-898 - A. M. Ertel'.

Hydrodynamic Conditions of Operating a Bearing in the Variable Process of Semiliquid Friction

Presented 4 Jan 1945 by L. S. Leybenzon, Academician

P. 899-904 - Z. Sh. Kiseh

Concerning a Synthesis of Multi-Link Mechanisms

Presented 12 Feb 1945 by N. G. Bruevich, Academician.

P. 905-916 - P. K. Konakov.

Experiment in Applying Theory of Similarity to Analysis of Operation of Steam Engine Locomotive

Presented 6 Jan 1945 by M. V. Kirpichev, Academician, and G. S. Zhdanov, Academician.

P. 917-926 - A. M. Gurvich.

Concerning Calculation of Products of Ideal Combustion

Presented 5 Jun 1944 by M. V. Kirpichev, Academician.

P. 927-930 - N. I. Mertsalov.

Concerning Dissociation of Steam

Presented 4 Mar 1944 by Ye. A. Chudakov, Academician.

P. 931-936 - N. G. Titov and R. I. Mordukhovich.

Method of Determining from Small Portions the Yields of Semicoking Coal Products.

Presented 25 Apr 1945 by S. S. Nametkin, Academician.

Institute of Combustible Minerals, Academy of Sciences, USSR.

P. 937-940 - P. M. Tsimbarevich.

Hypotheses of Durability as Applied to Rocks.

Presented 20 Apr 1945 by A. A. Skochinskiy, Academician.

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

P. 941-946 - V. F. Zhukov.

Characteristic Accidents which Occur when Sinking Sloping Mining Shafts Under Conditions of Permafrost

Presented 19 Mar 1945 by V. A. Obruchev, Academician.

V. A. Obruchev Institute of Permafrost Studies, Academy of Sciences, USSR.

P. 947-956 - D. S. Velesov.

Differential Method of Introduction of Nonnumerical Surfaces into Calculations of Optical Systems.

Presented 27 Mar 1945 by V. P. Linnik, Academician.

State Optical Institute.

P. 957-976

Some the Completed Activities of the Scientific Institutes. Division of Technical Sciences. Academy of Sciences. USSR. in 1944. (Papers)

No.
~~Nos.~~ 10-11 - 1943

P. 977-994 - V. L. Pondymain, Academician

Fundamental Theories of Construction and Operation of Supercavitating Screw Propellers.

Submitted 31 Jul 1945.

P. 995-1002 - G. A. Firsov.

The Question of Rolling in a Ship Equipped with an Antiroll Stabilizer.

Presented 25 Apr 1945 by V. L. Pondymain, Academician.

P. 1003-1022 - D. I. Sherman.

Concerning One Case of Variation of an Elastic Half-Space.

Presented 16 Jul 1945 by B. G. Galerkin, Academician (deceased).

Institute of Mechanics, Academy of Sciences, USSR.

P. 1023-1034 - M. Kreymes and M. Rozovskiy.

Design of Angular Velocities of Regular-Geared Mechanisms with Two Degrees of Freedom.

Presented 30 Mar 1945 by L. S. Leybenzon, Academician.

(im. Lomonosov) Moscow University and (Bauman) Moscow Advanced Technical School (Higher)

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

P. 1035-1062 - V. N. Obrastsov.

Concerning the Question of the Theory of Combined Transmeriation.

Submitted 8 Feb 1945.

P. 1063-1069 - G. V. Akimov and A. A. Kimelev, Corresponding Members, Academy of Sciences, USSR.

Metallography of Aviation Motor Valve Unit and Problem of Increase of Power.

Submitted 24 May 1945.

Division of Technical Sciences, Academy of Sciences, USSR; and Laboratory, All-Union Institute of Aviation Materials.

P. 1069-1092 - A. A. Bochvar and O. S. Zhalayeva, Corresponding Members, Academy of Sciences, USSR.

Analysis of Structural Components of Aluminum Cermet Casts and of Aluminum-Silicate Dual Alloys by Method of Micro-Hardness.

Submitted 3 Jul 1945.

Institute of Machine Management, Academy of Sciences, USSR

P. 1093-1098 - L. M. Feyler and N. P. Banyy.

Concerning Manufacture of Self-Fluxing Agglomerate from Iron Ores.

Presented 19 Jan 1945 by I. P. Bardin, Academician.

Institute of Metallurgy, Academy of Sciences, USSR.

P. 1099-1104 - I. S. Kaymarskiy and I. V. Orekhova

Physicochemical Properties of Chalcedony from the Kashpurskiy Site and Methods of its Utilization for Glass Manufacture.

Presented 6 Jul 1944 by D. S. Belyankin, Academician.

P. 1105-1114 - V. Ya. Khasilev.

Analysis of Configuration of Thermoelectrical Heating Systems and Application of this Analysis to Horsepower Selection for Centralized Heating Supply Systems.

Presented 4 Jun 1945 by G. M. Krzhizhanovskiy, Academician.

G. M. Krzhizhanovskiy Energy Institute, Academy of Sciences, USSR.

Branch of General Energetics.

P. 1115-1126 - G. N. Khudyakov.

Combustion of Liquid Fuels from a Free Surface.

Presented 1 Feb 1945 by G. M. Krzhizhanovskiy, Academician.

G. M. Krzhizhanovskiy Energy Institute, Academy of Sciences, USSR.

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

[1179-1302]

P. 1179-1302 - V. V. Soledovnikov.

A Method of Approximation in the Investigation of the Dynamics of Regulating Systems and Regulating Systems.

Presented 6 Aug 1945 by V. S. Kulebakin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

[1303-12]

P. 1303-1213 - V. V. Soledovnikov.

Concerning an Application of Operational Calculus to Dynamic Systems with Variable Parameters.

Presented 6 Aug 1945 by M. I. Lustnya, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

P. 1127-1130 - I. I. Novikov.

Observations concerning the Theory of Conditions Limiting the Flow of Gases.

Presented 7 Apr 1945 by M. V. Kirpichev, Academician.

K. Ye. Voroshilov Naval Academy, Leningrad

P. 1131-1138 - A. S. Zaymovskiy, O. N. Al'tgauzen, L. I. Rabkin, and I. N. Shmeleva.

Magneto-dielectric Cores for Radio-Frequencies on the Base of Alsifer (Aluminum-Silicon-Iron) Alloy.

Presented 10 Jul 1945 by K. I. Shenfer, Academician.

P. 1139-1144 - A. S. Berkman and D. I. Mash.

Influence of Grated Reflecting Screens on Field Structure of a Wave Guide. Slotted Shield.

Presented 13 July 1945 by B. A. Vvedenskiy, Academician.

P. N. Lebedev Physics Institute, Academy of Sciences, USSR.

P. 1145-1148 - N. Ye. Filonenko.

Concerning Question of Nature of Electro-Corrundum.

Presented 14 Aug 1944 by D. S. Belyankin, Academician.

State-Union-Central Scientific Research Laboratory of Abrasives and Polishing. (TsNILASh)

P. 1149-1160

From the Completed Activities of the Scientific Institutes, Division of Technical Sciences, Academy of Sciences, USSR, in 1944. (Papers)

No

Vol. 12 - 1945

No.

Note: the page numbers of Vol. 12 begin with page "1061" rather than page 1161.

[1161-89]

P. 1061-1089 - V. I. Kovalenkov, Corresponding Member, Academy of Sciences, USSR.

The Processes of Establishing Constant in the Movement of Electromagnetic Steady-State

Waves along Transition Communication Cables.

Submitted 6 Aug 1945.

Institute of Automatics and Telemechanics, Academy of Sciences, USSR.

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

[1189-96]
P. 1089-1096 - B. S. Sotskov.

A Method for Approximate Time Calculation of the Flow Process in Circuits with Nonlinear Parameters.

Presented 6 August 1945 by V. S. Kulebakin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

[1197-1208]
P. 1097-1108 - A. V. Frenke.

The Question of Calculating Damping Times of Distance Measurement Systems.

Presented 6 August 1945 by V. S. Kulebakin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

[1209-27]
P. 1109-1127 - M. A. Gavrilov.

Determining Number of Terminals in Circuits of Terminal-Relay Revertheless Machines, and their Distribution Exercises in Relay.

Presented 6 Aug 1945 by V. S. Kulebakin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

[1228-38]
P. 1128-1138 - V. I. Trapeznikov.

Forms of Auxiliary Energy of Automatic Installations

Presented 6 Aug 1945 by V. S. Kulebakin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

[1239-45]
P. 1139-1145 - B. K. Tellshevskiy.

Photoelectric Methods for Automatically Inspecting the Surfaces of Products Manufactured by the Metal Industry.

Presented 6 Aug 1945 by V.S. Kulebakin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

[1246-62]
P. 1146-1162 - B. N. Petrov.

The Construction and Transformation of Structural Diagrams.

Presented 6 Aug 1945 by N. N. Luzin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

[1263-68]
P. 1163-1168 - Ya. Z. Tsypkin and P. V. Bromberg.

Concerning Degrees of Stability of Linear Systems.

Presented 6 Aug 1945 by V. S. Kulebakin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

[1269-78]
P. 1169-1178 - M. V. Meyerov.

Criterion of Aperiodicity of Adjustment.

Presented 6 Aug 1945 by V. S. Kulebakin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5

[1179-1302]

P. 1179-1302 - V. V. Soledovnikov.

A Method of Approximation in the Investigation of the Dynamics of Regulating Systems and Servomotor Systems.

Presented 6 Aug 1945 by V. S. Kulebakin, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

[1303-12]

P. 1303-1312 - V. V. Soledovnikov.

Concerning an Application of Operational Calculus to Dynamic Systems with Variable Parameters.

Presented 6 Aug 1945 by N. I. Lusinyn, Academician.

Institute of Servomechanics and Telemechanics, Academy of Sciences, USSR.

MD

Declassified in Part - Sanitized Copy Approved for Release 2012/05/16 : CIA-RDP82-00039R000100160045-5